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Havenga et al.

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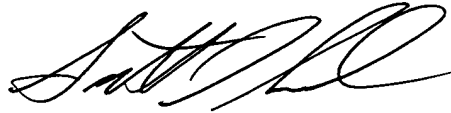
Applicants offer to supply any explanation or discussion of the documents which the Examiner feels is necessary or desirable and which is requested.

This Information Disclosure Statement is filed after the mailing date of the first Office Action on the merits.

The fee pursuant to 37 C.F.R. § 1.17(p) is enclosed.

**Serial No.: 09/348,354**

Respectfully submitted,

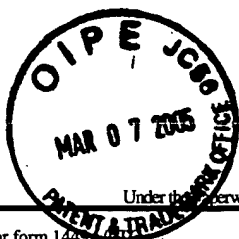


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Date: November 22, 2004  
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**INFORMATION DISCLOSURE  
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Sheet 1 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123.2US

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		4,487,829	12/11/84	Sharp et al.	
		4,517,686	05/21/85	Ruoslahti et al.	
		4,578,079	03/25/86	Ruoslahti et al.	
		4,589,881	05/20/86	Pierschbacher et al.	
		4,593,002	06/03/86	Dulbecco	
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		5,349,053	09/20/94	Landolfi	
		5,403,484	04/04/95	Ladner et al.	

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		EP 259212	08/11/87	Transgene S.A.		
		WO 91/00360	01/10/91	Medarex, Inc.		
		WO 91/05871	05/02/91	Medarex, Inc.		
		WO 91/05805	05/02/91	Trustees of Dartmouth College		
		WO 92/02553	02/20/92	Delta Bi-otechnology Limited		
		WO 92/13081	08/06/92	British Technology Group PLC		

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**INFORMATION DISCLOSURE  
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Sheet 2 of 22

**Complete if Known**

Application Number	09/348,354
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Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123.2US

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		5,436,146	07/25/95	Shenk et al.	
		5,443,953	08/22/95	Hansen et al.	
		5,474,935	12/12/95	Chatterjee et al.	
		5,521,291	05/28/96	Curiel et al.	
		5,534,423	07/09/96	Plasson et al.	
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		5,559,099	09/24/96	Wickham et al.	
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		5,871,727	02/16/99	Curiel	

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		WO 93/03769	03/04/93	U.S. Dept. of Health and Human Services		
		WO 93/06223	04/01/93	Centre National De La Recherche Scientifique		
		WO 93/07282	04/15/93	Boehringer Ingelheim International GMBA		
		WO 93/07283	04/15/93	Boehringer Ingelheim International GMBA		
		WO 94/08026	04/14/94	Rhone-Poulenc Rorer S.A.		
		WO 94/10323	05/11/94	Imperial Cancer Research Technology Limited		

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Sheet 3 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123.2US

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		5,871,982	02/16/99	Wilson et al.	
		5,877,011	03/02/99	Armentano et al.	
		5,922,315	07/13/99	Roy	
		5,994,128	11/30/99	Fallaux et al.	
		6,033,908	03/07/00	Bout et al.	
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		6,100,086	08/08/00	Kaplan et al.	
		6,127,525	10/03/00	Crystal et al.	
		6,287,857	09/11/01	O'riordan et al.	
		6,306,652	10/23/01	Fallaux et al.	
		6,486,133	11/26/02	Herlyn et al.	
		6,492,169	12/10/02	Vogels et al.	
		6,669,942	12/30/03	Perricaudet et al.	

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		WO 94/11506	05/26/94	Arch Development Corporation		
		WO 94/15644	07/21/94	Imperial Cancer Research Technology Limited		
		WO 94/17832	08/18/94	The Scripps Research Institute		
		WO 94/24299	10/27/94	Boehringer Ingelheim International GMBA		
		WO 94/26915	11/24/94	The Regents of the University of Michigan		
		WO 95/05201	02/23/95	Genetic Therapy, Inc.		

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Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123.2US

## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 95/06745	03/09/95	Max-Planck-Gesellschaft Zur Förderung Der Wissenschaften E.U.		
		WO 95/14785	06/01/95	Rhone-Poulenc Rorer S.A.		
		WO 95/16037	06/15/95	Menarini Ricerche Sud S.p.A.		
		WO 95/21259	08/10/95	U.S. Dept. of Health and Human Services		
		WO 95/26412	10/05/95	The UAB Research Foundation		
		WO 95/27071	10/12/95	Board of Regents, The University of Texas System		

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				First Named Inventor	Havenga et al.
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				Examiner Name	M. Marvich
				Attorney Docket Number	2578-4123.2US
Sheet	5	of	22		

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		WO 95/31187	11/23/95	McMaster University		
		WO 95/31566	11/23/95	Viagene, Incorporated		
		WO 96/00326	01/04/96	Reinert, Gary, L., Sr.		
		WO 96/00790	01/11/96	Rhone-Poulenc Rorer S.A.		
		WO 96/07739	03/14/96	Neurocrine Biosciences, Incorporated		
		WO 96/10087	04/04/96	Rhone-Poulenc Rorer S.A.		

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		WO 96/12030	04/25/96	Rhone-Poulenc Rorer S.A.		
		WO 96/13598	05/09/96	The Trustees of the University of Pennsylvania		
		WO 96/13597	05/09/96	The Trustees of the University of Pennsylvania		
		WO 96/14837	05/23/96	Genetic Therapy, Inc.		
		WO 96/17073	06/06/96	Takara Shuzo Co., LTD.		
		WO 96/ 18740	06/20/96	Rhone-Poulenc Rorer S.A.		

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		WO 96/24453	08/15/96	Withers, Graham, Rex		
		WO 96/26281	08/29/96	Genvec, Inc. Cornell Research Foundation, Inc.		
		WO 96/35798	11/14/96	Introgene B.V.		
		WO 97/00326	01/03/97	Introgene B.V.		
		WO 97/12986	04/10/97	Cornell Research Foundation, Inc.		
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				Application Number	09/348,354
				Filing Date	July 7, 1999
				First Named Inventor	Havenga et al.
				Group Art Unit	1636
				Examiner Name	M. Marvich
				Attorney Docket Number	2578-4123.2US
Sheet	8	of	22		

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 97/38723	10/23/97	Immusol Incorporated		
		WO 98/07865	02/26/98	Genvec, Inc.		
		WO 98/11221	03/19/98	Dana-Farber Cancer Institute		
		WO 98/13499	04/02/98	The Scripps Research Institute		
		WO 98/22609	05/28/98	Genzyme Corporation		
		WO 98/ 32842	07/30/98	Genetic Therapy, Inc.		

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Sheet	9	of	22
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**Complete if Known**

Application Number	09/348,354
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Filing Date	July 7, 1999
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First Named Inventor	Havenga et al.
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Group Art Unit | 1636

Examiner Name M. Marvich

Attorney Docket Number	2578-4123.2US
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## U.S. PATENT DOCUMENTS

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		WO 98/40509	09/17/98	Genvec, Inc.		
		WO 98/49300	11/05/98	Collateral Therapeutics		
		WO 98/50053 A1	11/12/98	Genetic Therapy, Inc.		
		EP 1016726	12/30/98	Introgene B.V.		
		WO 99/32647	07/01/99	Introgene B.V.		
		EP 1067188	07/08/99	Introgene B.V.		

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				Filing Date	July 7, 1999
				First Named Inventor	Havenga et al.
				Group Art Unit	1636
				Examiner Name	M. Marvich
				Attorney Docket Number	2578-4123.2US
Sheet	10	of	22		

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 99/47180A1	09/23/99	Genzyme Corporation		
		WO 99/55132	11/04/99	Intogene B.V.		
		WO 99/58646	11/18/99	Genera S.P.A.		
		EP 1020529	11/19/99	Intogene B.V.		
		WO 00/03029	01/20/00	Intogene B.V.		
		WO 00/24730 A2	05/04/00	The University of British Columbia		

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	11	of	22
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**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123.2US

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 00/31285	06/02/00	Intogene B.V.		
		WO 00/52186	09/08/00	Intogene B.V.		
		WO 00/70071 A1	11/23/00	Intogene B.V.		
		WO 01/04334	01/18/01	Intogene B.V.		
		WO 01/90158 A1	11/29/01	Crucell Holland B.V.		
		WO 02/24730	03/28/02	Crucell Holland B.V.		
		WO 02/27006	04/04/02	Crucell Holland B.V.		

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**INFORMATION DISCLOSURE  
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Sheet 12 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 21JS

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
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Sheet 13 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 211S

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Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BOURNELL et al., "In vitro construction of a recombinant adenovirus Ad2:Ad5," Gene, 13, 311-317 (1981).	
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**INFORMATION DISCLOSURE  
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Sheet 14 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 21JS

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Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		CRAWFORD-MIKSZA et al., "Analysis of 15 Adenovirus Hexon Proteins Reveals the Location and Structure of Seven Hypervariable Regions Containing Serotype-Specific Residues," Journal of Virology, Mar. 1996, p. 1836-1844.	
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		DOUGLAS J T et al.: "Strategies to accomplish targeted gene delivery to muscle cells employing tropism-modified adenoviral vectors" Neuromuscular Disorders, Pergamon Press, GB, vol. 7, July 1997 (1997-07), pages 284-298, XP002079944 ISSN: 0960-8966.	

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Considered

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Sheet 15 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 2US

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		GREBER et al., "Stepwise Dismantling of Adenovirus 2 during Entry into Cells," Cell, 75, 477-486 (1993).	

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Sheet 16 of 22

**Complete if Known**

Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 21JS

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		GREEN et al., "Evidence for a repeating cross- sheet structure in the adenovirus fibre," EMBO Journal, 2(8), 1357-1365 (1983).	
		GRUBB et al., Inefficient gene transfer by adenovirus vector to cystic fibrosis airway epithelia of mice and humans, Nature, 371, 802-806 (1994).	
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Sheet 17 of 22

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Application Number	09/348,354
Filing Date	July 7, 1999
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 21JS

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Sheet 18 of 22

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Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 2US

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Sheet 19 of 22

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First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 2US

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Group Art Unit	1636
Examiner Name	M. Marvich
Attorney Docket Number	2578-4123 21JS

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